

**REMARKS**

In accordance with the foregoing, Claims 3-25, 27, and 37-39 are pending and under consideration. Reconsideration is respectfully requested.

**REJECTIONS UNDER 35 U.S.C. § 102**

Claim 39 is rejected under 35 U.S.C. § 102(e) as being anticipated by Tsinberg et al. (U.S. Patent No. 6,212,680)).

Claim 39 recites "wherein the program guide information is acquired by searching the accessible channels according to past tendency of a user."

Tsinberg et al. discusses "the configuration of FIG. 3, in either embodiment, has the additional benefit of allowing acquisition of EPG information from different RF channels while the viewer stays tuned to a particular channel on main tuner. As described above, the current broadcast standard does not require a particular broadcaster to carry EPG information of other broadcasters. Thus, if a viewer calls up the EPG when turned to a channel, he will only see the program information associated with that channel." (see col. 5, lines 47-55 of Tsinberg et al.).

It is unclear how the Examiner asserts that "if a viewer calls up the EPG when turned to a channel, he will only see the program information associated with that channel" disclosed in Tsinberg et al. is the same as "wherein the program guide information is acquired by searching the accessible channels according to past tendency of a user." as recited in claim 39

Tsinberg et al. also discusses "otherwise, CPU 6 tunes PIP tuner 8 to a new channel (step 420 and determines if EPG data has already been collected for that particular channel (step 43). If so, CPU 6 tunes PIP tuner 8 to another channel for which no EPG data has been collected is found. Alternatively, CPU 6 can maintain a database stored in a memory connected to CPU indicating which channels it has and has not collected EPG data from and tune PIP tuner 8 TO one of the latter channels. CPU 6 then determines if it has previously attempted to collect EPG data from the tuned channel (step 44). It could do this by checking a database containing a list of previously monitored channels. If this is the first attempt to collect EPG data from the tuned channel, then CPU 6 begins screening for EPG data (step 45). If EPG data is detected (step 46), it is stored and combined with other collected EPG data. The process then returns to step 40. While monitoring for EPG data, CPU 6 also monitors the amount of time it has been tuned to the particular channel (step 47). If this time exceeds a predetermined time, for example one minute, then CPU 6 tunes PIP tuner 8 to a different channel (step 43). If, in step 44, CPU 6 determines that it has previously and unsuccessfully attempted to collect EPG data from the tuned channel, then it increases the amount of time, to two minutes for example, that it will monitor the channel (step 48). "(see col. 5 line 62 to col. 6, line 25 of Tsinberg et al.).

As noted above, Tsinberg et al. merely collecting EPG data by checking whether a database contains a list of previously monitored channels and it is checked and combining with already existing EPG data and collected EPG data.”

Thus, Tsinberg et al. is related to collecting EPG data by monitoring EPG data, but fails to disclose “wherein the program guide information is acquired by searching the accessible channels according to past tendency of a user” as recited in claim 39.

Claim 39 further recites “simultaneously with the acquiring of the program guide information, displaying a program list including program guide information of channels obtained by the tuner before the program guide command is applied, in response to the program guide command.”

Tsinberg et al. discloses “at the conclusion of this process, CPU 6 will have gathered EPG information from all the digital channels. It combines this information so that, upon request of the viewer, the entire EPG can be displayed using graphics overlay 7.”(col. 6, lines 21-26-emphasis added).

As noted above, Tsinberg et al. merely discloses “the entire EPG can be displayed using graphics overlay 7.”

Thus, “the entire EPG can be displayed using graphics overlay 7” disclosed in Tsinberg et al. is different from “simultaneously with the acquiring of the program guide information, displaying a program list including program guide information of channel.”

Accordingly, it is respectfully submitted that Tsinberg does not disclose the invention as recited in claim 39.

### **REJECTIONS UNDER 35 U.S.C. § 103**

Claims 3-10, 12-15, 19-23, 27, and 37-38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cuccia (U.S. Patent No. 6,337,719) in view of Tsinberg et al.

Claim 3 recites “acquiring program guide information of the accessible channels being broadcast from a tuner in response to the program guide command, wherein the accessible channels include a currently tuned in channel, a preferential channel, and remaining channels, and wherein the program guide information is acquired by searching the accessible channels according to a past tendency of a user, wherein the past tendency of the user can be estimated by a probability estimator of the receiver...” (emphasis added).

As such, it is respectfully submitted that the combination of Cuccia and Tsinberg et al. does not teach or suggest wherein the past tendency of the user can be estimated by a probability estimator of the receiver as recited in claim 3.

Claim 4 recites "further comprising providing a message indicating that the user must wait until the program list is written."

The Office Action asserts that the capability of displaying message indicates the user must wait until the program is written is well known and old in the art.

It is noted that "With the passage of the 1952 Patent Act, the courts and the Board have taken the view that a rejection based on the principle of old combination is NO LONGER VALID. Claims should be considered proper so long as they comply with the provisions of 35 U.S.C. 112, second paragraph. A rejection on the basis of old combination was based on the principle applied in *Lincoln Engineering Co. v. Stewart-Warner Corp.*, 303 U.S. 545, 37 USPQ 1 (1938). The principle was that an inventor who made an improvement or contribution to but one element of a generally old combination, should not be able to obtain a patent on the entire combination including the new and improved element. A rejection required the citation of a single reference which broadly disclosed a combination of the claimed elements functionally cooperating in substantially the same manner to produce substantially the same results as that of the claimed combination. The case of *In re Hall*, 208 F.2d 370, 100 USPQ 46 (CCPA 1953) illustrates an application of this principle. The court pointed out in *In re \*Bernhart*, 417 F.2d 1395, 163 USPQ 611 (CCPA 1969) that the statutory language (particularly point out and distinctly claim) is the only proper basis for an old combination rejection, and in applying the rejection, that language determines what an applicant has a right and obligation to do. A majority opinion of the Board of Appeals held that Congress removed the underlying rationale of *Lincoln Engineering* in the 1952 Patent Act, and thereby effectively legislated that decision out of existence. *Ex parte Barber*, 187 USPQ 244 (Bd. App. 1974). Finally, the Court of Appeals for the Federal Circuit, in *Radio Steel and Mfg. Co. v. MTD Products, Inc.*, 731 F.2d 840, 221 USPQ 657 (Fed. Cir. 1984), followed the *\*Bernhart* case, and ruled that a claim was not invalid under *Lincoln Engineering* because the claim complied with the requirements of 35 U.S.C. 112, second paragraph. Accordingly, a claim should not be rejected on the ground of old combination." (see MPEP 2173.05(j) Old Combination [R-6]).

In view of above, it is respectfully submitted that combination of Cuccia and Tsinberg et al. does not teach or suggest the invention as recited in claim 4.

In addition, claims 5-6 are patentable due at least to their depending from claim 3, as well as for the additional recitations therein.

Claim 7 recites "said acquiring the program guide information comprises determining the sequence of accessing channels by proximity of channels to the channel tuned before the program guide command is executed."(emphasis added).

Cuccia further discusses "It is an achievement of the invention that the micro processor 118 further serves as controlling means for controlling the tuner 103 autonomously and as second signal processing means for extracting and processing SI from a selected transport stream. The micro processor 118 is conceived to control the tuner 103 in such a way that the tuner 103 successively selects all received transport streams. For each transport stream selected this way, the micro processor 118 checks whether the SI of the transport stream comprises EPG information, and if so, incorporates it in a compound EPG which is stored in the storage means 120. When the tuner 103 is not used, i.e. the TV-set is in stand-by mode or the signal processor 104 is occupied with processing signals from the signal inputs 117, the tuner 103 is free to scan the signals for the EPG information. The scanning process can be initiated by the user or started automatically, e.g. when the EPG information should be updated. To that end the micro processor 118 first checks whether the tuner 103 is available for the scanning process. Generally the micro processor of a digital TV-receiver is involved in controlling the receiver, so it is known per se that the micro processor 118 is able to maintain a state description of the receiver and deduce whether the tuner 103 is involved in supplying information to the signal processor 104 for presenting it on the screen 108 or using in another way, e.g. recording on a video recorder."(col. 4, lines 10-35).

As noted above, the scanning process in Cuccia merely discloses the micro processor 118 is conceived to control the tuner 103 in such a way that the tuner 103 successively selects all received transport streams. When the tuner 103 fails to disclose "the sequence of accessing channels by proximity of channels to the channel tuned before the program guide command is executed." as recited in claim 7.

As such, it is respectfully submitted that the combination Cuccia and Tsinberg et al. does not teach or suggest the invention as recited in claim 7.

Claim 8 recites "determining the order of priority of channels having the same proximity to the channel tuned before the program guide command is executed according to a channel up/down command input before corresponding channels are accessed."(emphasis added).

However, Cuccia fails to disclose "determining the order of priority of channels... according to a channel up/down command input before corresponding channels are accessed." as recited in claim 8.

Accordingly, it is respectfully submitted that the combination Cuccia and Tsinberg et al. does not teach or suggest the invention as recited in claim 8.

Claim 9 recites "wherein an upward or downward direction is preferential when no channel up/down command is executed."(emphasis added).

Again, Cuccia merely discloses "It is an achievement of the invention that the micro processor 118 further serves as controlling means for controlling the tuner 103 autonomously and as second signal processing means for extracting and processing SI from a selected transport stream. The micro processor 118 is conceived to control the tuner 103 in such a way that the tuner 103 successively selects all received transport streams. For each transport stream selected this way, the micro processor 118 checks whether the SI of the transport stream comprises EPG information, and if so, incorporates it in a compound EPG which is stored in the storage means 120. When the tuner 103 is not used, i.e. the TV-set is in stand-by mode or the signal processor 104 is occupied with processing signals from the signal inputs 117, the tuner 103 is free to scan the signals for the EPG information. The scanning process can be initiated by the user or started automatically, e.g. when the EPG information should be updated. To that end the micro processor 118 first checks whether the tuner 103 is available for the scanning process. Generally the micro processor of a digital TV-receiver is involved in controlling the receiver, so it is known per se that the micro processor 118 is able to maintain a state description of the receiver and deduce whether the tuner 103 is involved in supplying information to the signal processor 104 for presenting it on the screen 108 or using in another way, e.g. recording on a video recorder." (see col. 4, lines 10-35 of Cuccia)."

As noted above, Cuccia discloses "The micro processor 118 is conceived to control the tuner 103 in such a way that the tuner 103 successively selects all received transport streams. For each transport stream selected this way, the micro processor 118 checks whether the SI of the transport stream comprises EPG information, and if so, incorporates it in a compound EPG which is stored in the storage means 120," but fails to disclose "an upward or downward direction" as recited in claim 9.

Accordingly, it is respectfully submitted that the combination Cuccia and Tsinberg et al. does not teach or suggest the invention as recited in claim 9.

Claim 10 recites "searching channels upward or downward from the channel tuned before the program guide command is executed."

As noted above, none of cited references teach or suggest "searching channels upward or downward from the channel tuned" as recited in claim 10.

Claim 12 recites "the displaying comprising displaying simultaneously with the acquiring of the program guide information, wherein the program guide information is acquired by searching the accessible channels according to a past tendency of a user;.."

Claim 12 is patentable due at least to the same rationales as claim 3, as well as for the additional recitations therein.

Claims 13-16 are patentable due at least their depending from claim 12, as well as for the additional recitations therein.

Claims 11, 16-17, and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cuccia in view of Tsinberg et al.

Claims 11 and 24 are patentable due at least to their depending from claims 1 and 19, respectively.

Claim 16 recites "wherein said acquiring the guide information comprises searching channels upward or downward from the currently tuned in channel before the program guide command is executed."

Cuccia merely discusses "It is an achievement of the invention that the micro processor 118 further serves as controlling means for controlling the tuner 103 autonomously and as second signal processing means for extracting and processing SI from a selected transport stream. The micro processor 118 is conceived to control the tuner 103 in such a way that the tuner 103 successively selects all received transport streams. For each transport stream selected this way, the micro processor 118 checks whether the SI of the transport stream comprises EPG information, and if so, incorporates it in a compound EPG which is stored in the storage means 120. When the tuner 103 is not used, i.e. the TV-set is in stand-by mode or the signal processor 104 is occupied with processing signals from the signal inputs 117, the tuner 103 is free to scan the signals for the EPG information. The scanning process can be initiated by the user or started automatically, e.g. when the EPG information should be updated. To that end the micro processor 118 first checks whether the tuner 103 is available for the scanning process. Generally the micro processor of a digital TV-receiver is involved in controlling the receiver, so it is known per se that the micro processor 118 is able to maintain a state description of the receiver and deduce whether the tuner 103 is involved in supplying information to the signal processor 104 for presenting it on the screen 108 or using in another way, e.g. recording on a video recorder." (see col. 4, lines 15-35 of Cuccia), but fails to recite "searching channels upward or downward from the currently tunes in channel before the program guide command is executed." as recited in claim 16.

Accordingly, it is respectfully submitted that the combination of Cuccia and Tsinberg et al. does not teach or suggest the invention as recited in claim 16.

Claim 17 is patentable due at least to its depending from claim 12, as well as for the additional recitations therein.

Claim 19 recites "searches for remaining accessible channels to obtain program guide information being broadcast for the remaining accessible channels by controlling said tuner in a background operation while a user refers to the program list, wherein the program guide

information is acquired by searching the remaining accessible channels according to a past tendency of a user;...”

Claim 19 is patentable due at least the same rationales as claim 12, as well as for the additional recitations therein.

Claims 18 and 25 are rejected under 35 U.S.C. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate as being unpatentable Cuccia in view of Tsinberg et al., and further in view of Mugura et al. (U.S. Patent No. 6,243,142).

Claim 18 recites “displaying a message indicating a status of program guide information in response to the program guide information of a corresponding channel not being stored.”

Mugura et al. discloses “A method and apparatus for displaying graphic images to indicate a status of programs in an electronic program guide are provided. According to one aspect of the invention, a multiple channel broadcasting system generates an electronic program guide identifying channels and corresponding programs in the broadcasting system. The broadcast system generates at least one graphic image to indicate a status of these programs, the status including whether a user has selected pay-per-view broadcasts for purchase. The status also includes whether a broadcast system timer has been set to tune to a particular channel program at a designated time, whether a channel program has been set for recording, and whether a program is designated as a favorite program. The broadcast system displays the graphic images or icons within an electronic program guide in areas delineating particular programs that a user has selected for purchase so that the user can view the status of the programs while viewing the electronic program guide. The broadcast system also displays the graphic images within electronic menus.”(col. 2, lines 20-40 of Mugura et al.).

Mugura et al. discloses displaying status related to “a particular channel program at a designated time, a channel program has been set for recording, and whether a program is designated as a favorite program,” but fails to disclose “displaying a message indicating a status of program guide information in response to the program guide information of a corresponding channel not being stored.” as recited in claim 18.

Thus, it is respectfully submitted that the combination of Cuccia, Tsinberg et al., and Mugura et al. does not teach or suggest the invention as recited in claim 18.

In addition, claim 25 is also patentable due at least to the same or similar reasons as claim 18.

## **CONCLUSION**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.


Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By:   
Sang Chul Kwon  
Registration No. 63,153

1201 New York Ave, N.W., 7th Floor  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501